

Abstract of the Disclosure

An open magnetic structure comprising a conical magnetic structure including a hollow conical magnet surrounding and contacting an inner pole piece that generates an NMR imaging field around the head of a patient. The annular surface of contact between the conical magnetic structure and the inner pole piece is configured such that that annular surface of contact is maintained as an equipotential surface to maintain a uniform imaging field. An advantage is to integrate as one-piece the various permanent magnetic sections to greatly simplify fabrication. A method for determining the profile of the annular surface of contact is also included.

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